CHARGED PARTICLE BEAM STABILIZING DEVICE

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Abstract

PROBLEM TO BE SOLVED: To provide a stable charged particle beam by reducing the change of a charged particle beam radiated due to the change with time of a charged particle source. SOLUTION: This device is provided with a beam deflecting system 3 to deflect the charged particle beam from the charged particle source 2, a measuring means 10 to determine time-based change of the charged particle beam based on deviation of a radiation position of the charged particle beam, and a correction quantity determining means 12 to calculate correction quantity to correct deviation quantity of the charged particle beam by the deflecting system in accordance with time based on the change with time of the charged particle beam. The temporal change of the charged particle beam is predicted, and the deflecting system is driven based on this prediction to control the charged particle beam, thereby axial deflection of the charged particle beam due to the change with time is axially regulated to stabilize it.

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